Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
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<u>Ex parte</u> SAMUEL STEVEN ALLISON and KENNETH JAMES BARKER
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Appeal No. 2002-2164
Application No. 09/067,599
_____

ON BRIEF
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Before THOMAS, BARRETT, and BLANKENSHIP, <u>Administrative Patent Judges</u>.

BLANKENSHIP, <u>Administrative Patent Judge</u>.

<u>DECISION ON APPEAL</u>

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 15-20, 33, and 36-38.

We affirm-in-part.

BACKGROUND

The invention relates to bitstream pattern detection techniques, as applied to stations in a communications network which may be awakened upon the matching of a pattern. Claim 15 is reproduced below.

15. A device for matching patterns against data comprising:

a first memory in which a set of patterns are stored;

a second memory that stores mask data identifying patterns in the first memory to be matched against the data; and

pattern match logic circuit arrangement correlating marked patterns in said first memory against the data and generating at least one control signal if a match occurs.

The examiner relies on the following references:

Dosiere et al. (Dosiere)	5,778,000	Jul. 7, 1998 (filed Jul. 19, 1996)
Jeng	5,892,768	Apr. 6, 1999 (filed Sep. 12, 1996)
Williams et al. (Williams)	5,938,771	Aug. 17, 1999 (filed Oct. 30, 1997)

Claims 15, 16, 19, 20, 33, and 36 stand rejected under 35 U.S.C. § 102 as being anticipated by Dosiere.

Claim 33 stands rejected under 35 U.S.C. § 102 as being anticipated by Williams.

Claims 17, 18, 37, and 38 stand rejected under 35 U.S.C. § 103 as being unpatentable over Dosiere and Jeng.

Claims 1-14 have been canceled. Claims 21-32, 34, and 35 have been allowed, subsequent to the Final Rejection.

We refer to the Final Rejection (Paper No. 13) and the Examiner's Answer (Paper No. 18) for a statement of the examiner's position and to the Brief (Paper No. 17) and the Reply Brief (Paper No. 19) for appellants' position with respect to the claims which stand rejected.

OPINION

Section 102 rejection of claims 15, 16, 19, 20, 33, and 36 over Dosiere

Appellants present separate arguments in support of the subject matter common to claims 16 and 20. Appellants also present separate arguments in support of claim 36, although in a section of the Brief that is ostensibly in response to a Section 103 rejection. Accordingly, we select claims 15, 16, and 36 as representative. See 37 CFR § 1.192(c)(7). See also In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) ("If the brief fails to meet either requirement [of 37 CFR § 1.192(c)(7)], the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim.").

Dosiere relates to a frame synchronisation method that includes detection of an n-bit pattern in a bitstream. Appellants submit that the reference does not refer to a

"first" and a "second" memory, as recited in instant claim 15. Appellants argue that Dosiere only discloses a single memory.

Appellants' argument appears to be founded on the view that the claims somehow require two separate memory chips. Appellants' disclosure (e.g., Fig. 1) refers to separate boxes representing Pattern RAM and Mask RAM, which may be suggestive of separate memory chips. Appellants, however, point to nothing in the record to indicate that the scope of the instant claims should be limited to the disclosed embodiment. On the contrary, claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550 (CCPA 1969).

Dosiere describes a "first memory" constituting a table containing information with respect to the next set of bits to be searched for in the bitstream. The method determines if a received m-bit set forms part of the n-bit pattern in the bitstream. Col. 4, l. 47 - col. 5, l. 7. In the case that the first m-bit set forms part of the n-bit pattern, the first memory contents is a pointer to a second memory location, which contains match and mask patterns. Col. 5, ll. 20-52. Even assuming that what Dosiere refers to as "first memory" and "second memory location" is to be interpreted as memory contents within a single physical memory chip, we do not consider the instant claims to set forth

the allegedly distinguishing feature argued by appellants. For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference, but this is not an "ipsissimis verbis" test. In re Bond, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990).

Dosiere explicitly describes, in column 5, that the second memory contains a head mask pattern, indicating the positions of bits to verify in bits preceding the first m-bit set in the incoming bitstream, and a tail mask pattern, indicating the positions of bits to verify in bits following the first m-bit set in the incoming bitstream. Appellants appear to acknowledge the teachings, but argue (Brief at 6) that the reference "does not teach mask data to identify the patterns to be matched against data," alleging that the mask data of Dosiere are "used differently from the mask data" recited in the instant claims.

Instant claim 15 recites that the second memory "stores mask data identifying patterns in the first memory to be matched against the data...." Appellants do not explain why the instant claims require something that is "used differently" from the mask data described by the reference. We consider Dosiere's description of mask data to meet to the requirements of the instant claims, and see no reasonable basis for appellants' unexplained position.

Appellants contend that claims 16 and 20 are separately patentable in that they require the number of marked patterns to be less than the total number of patterns in the first memory. In appellants' view, Dosiere does not disclose or suggest the subject

matter of claims 16 and 20 because Dosiere only allows checking of one pattern, which is a small synchronization pattern in a data stream. (Brief at 5.)

Representative claim 16 recites that the marked patterns are "fewer than the total number of patterns in said first memory." Even if we were to agree that Dosiere "only allows checking of one pattern," we find nothing in claim 16 that recites "checking" of more than one pattern. Dosiere discloses, in Figure 2a, at least six patterns (82, B1, AC, FF, C1, and DA) that are greater in number than the three marked patterns (1, ACFF, C1D; see col. 6, l. 49 - col. 7, l. 23). Dosiere thus meets the broad terms of claim 16.

Instant claim 36 stands rejected under Section 102 (Answer at 7), but also appears to be treated in the Section 103 rejection (e.g., Answer at 10).[1] In any event, we agree with appellants there is no showing of disclosure or suggestion of the subject matter of claim 36. The portions of Dosiere relied upon by the Section 102 rejection refers to pointer values (e.g., 0001 in Fig. 2b), bit pointers (e.g., 4 in Fig. 2b), and bitstream pointer values. None, however, include mask bits, as required by instant claim 36.

For the foregoing reasons, we sustain the rejection of claims 15, 16, 19, 20, and 33, but do not do not sustain the rejection of claim 36, under 35 U.S.C. § 102 as being anticipated by Dosiere.

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[1] Since claim 37 recites "eight patterns," and claim 38 recites "groups of 4 mask bits," it is apparent that the Section 103 rejection is applied against claims 37 and 38.

Section 102 rejection of claim 33 over Williams

In response to the Section 102 rejection of claim 33 over Williams, appellants argue that Williams fails to teach the details of any pattern matching techniques. (Brief at 7.) Williams relates to use of "on-now pattern match logic" and "Magic Packet™ match logic" (elements 60 and 62 in Fig. 2), described at column 4, line 45 et seq. As referenced in columns 1 and 2 of Williams, the "On-Now Power Management Scheme" and the "Magic Packet™" scheme were known and described in the prior art at the time of Williams' invention.

We agree with appellants that Williams fails to describe the match logic in sufficient detail to support a finding of anticipation with respect to the subject matter of instant claim 33. The rejection (Answer at 7) appears to rely on a theory of inherency in regard to the claimed requirement of providing pointers.

With respect to what may be "inherent," however, our reviewing court has set out clear standards for such a showing. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). Absent evidence (e.g., a prior art description of the details of the standards utilized by Williams) in support of the finding by the examiner that is disputed by appellants, the rejection must fail.

We thus do not sustain the rejection of claim 33 under 35 U.S.C. § 102 as being anticipated by Williams.

Section 103 rejection of claims 17, 18, 37, and 38 over Dosiere and Jeng

Instant claim 17 adds the limitation that the data is received from a network. Appellants do not appear to provide arguments in response to the rejection of instant claim 17 aside, perhaps, from the remarks at page 8 of the Brief. However, we understand the examiner's language of "as applied to" claims 15 and 19 "above" to merely indicate that the Section 103 rejection incorporates the findings set forth in the Section 102 rejection applied against claims 15 and 19. As such, we find no basis for confusion. We sustain the Section 103 rejection of claim 17.

We agree with appellants (Brief at 10), however, that the rejection fails to provide findings in support of why the artisan would have been led to combine the teachings of Dosiere and Jeng in such a way as to arrive at the subject matter of instant claim 18. The rejection (Answer at 9-10) appears to merely allege where corresponding teachings may be found in the references applied, without identifying any reasons from the prior art as to why the artisan would have made the combination. The rejection applied against instant claims 37 and 38 (Answer at 10)[2] suffers from similar problems. Moreover, claims 37 and 38 depend from claim 36. The rejection applied against the

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[2] As previously noted herein, the rejection apparently refers to erroneous claim numbers.

dependent claims does not remedy the deficiency in the Section 102 rejection applied

against claim 36.

For the foregoing reasons we sustain the rejection of claim 17, but do not sustain

the rejection of claim 18, 37, or 38, under 35 U.S.C. § 103 as being unpatentable over

Dosiere and Jeng.

CONCLUSION

The rejection of claims 15, 16, 19, 20, and 33 under 35 U.S.C. § 102 as being

anticipated by Dosiere is affirmed. The rejection of claim 36 under 35 U.S.C. § 102 as

being anticipated by Dosiere is reversed.

The rejection of claim 33 under 35 U.S.C. § 103 as being anticipated by Williams

is reversed.

The rejection of claim 17 under 35 U.S.C. § 103 as being unpatentable over

Dosiere and Jeng is affirmed. The rejection of claims 18, 37, and 38 under 35 U.S.C.

§ 103 as being unpatentable over Dosiere and Jeng is reversed.

The examiner's decision in rejecting claims 15-20, 33, and 36-38 is thus

affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

JAMES D. THOMAS)
Administrative Patent Judge)
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) BOARD OF PATENT
LEE E. BARRETT)   APPEALS
Administrative Patent Judge)   AND
) INTERFERENCES
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